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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/929,855	08/14/2001	James L. Todsen	38880.2200	9850
75	90 07/08/2004		EXAM	INER
W. Daniel Swayze III Texas Instruments Incorporated 7839 Churchill Way, MS 3999 P.O. Box 655474			MAI, TAN V	
			ART UNIT	PAPER NUMBER
			2124	···
Dallas, TX 75	265		DATE MAILED: 07/08/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application M	Applicant(a)	
	Application No.	Applicant(s)	/\
Office Action Summary	09/929,855	TODSEN ET AL.	
Office Action Summary	Examiner	Art Unit	
7. 444.000 0.475	Tan V Mai	2124	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communicatio D (35 U.S.C. § 133).	n.
Status			
1) Responsive to communication(s) filed on 25 Fe	ebruary 2004.		
2a) This action is FINAL . 2b) ⊠ This	action is non-final.		
3) Since this application is in condition for allowar closed in accordance with the practice under E			s
Disposition of Claims			
 4) Claim(s) 1-29 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) 1-3,13-15,18,19,23,25,26 and 29 is/ar 7) Claim(s) 4-12,16,17,20-22,24,27 and 28 is/are 8) Claim(s) are subject to restriction and/or 	vn from consideration. re rejected. objected to.		
Application Papers			
9) The specification is objected to by the Examine	r.		
10)☐ The drawing(s) filed on is/are: a)☐ acce			
Applicant may not request that any objection to the	= ' '	• •	
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex		· ·	a).
Priority under 35 U.S.C. § 119			
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of 	s have been received. s have been received in Application ity documents have been receive I (PCT Rule 17.2(a)).	on No ed in this National Stage	
Attachment(s)	. □	(DTO 440)	
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>8/14/01</u>. 	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:		

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1. The abstract of the disclosure is objected to because superfluous language is used in this paragraph (i.e., "comprising" and "comprise"). Correction is required. See MPEP § 608.01(b).

2. Claims 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per dependent claim 2, the terms "to receive and filter <u>a</u> sample of data during the first delay and <u>a</u> sample of data during a delay cycle" (lines 4-5) seem to be misdescriptive they should be --samples--.

As per independent claim 18, the phrase "second digital filter being selected to receive and filter samples of data during a subsequent delay cycle" (lines 8-9) should be --second digital filter being selected to receive and filter samples of data during the initial delay cycle and a subsequent delay cycle-- (see claim 2 and 13).

As per independent claim 25, the term "said composite arrangement" (line 2 from the bottom) lacks antecedent basis.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 13-15, 18-19, 23, 25-26 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGrath.

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As per independent claim 1, McGrath discloses, e.g., see Figs. 6-12, the invention substantially as claimed, including: a plurality of parallel filters which comprise a "composite filter arrangement" (e.g., see col.6, lines 37-53). It is noted that McGrath does not specifically detail the claimed (1) "settling rate" and (2) "noise resolution" features; however, McGrath does disclose the equivalent features. First, McGrath discloses "filter module F1 is a filter with very low latency implemented with time domain techniques whilse all other filter modules Fi are implemented with fast convolution techniques ..." (col. 7, lines 34-43). Second, because the filters are implemented by different techniques, the "noice resolution" should be different. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to design the claimed invention according to McGrath's teachings because the device has a plurality of parallel filters which comprise a composite filter arrangement as claimed.

As per dependent claim 2, McGrath discloses the claimed feature, e.g., see Figs. 8-9.

As per dependent claim 3, McGrath discloses M (M greater than 2) plurality of parallel filters.

Due to the similarity of claim 13-15, 18-19, 23, 25-26 and 29 to claims 1-3, they are rejected under a similar rationale.

4. Claims 4-12, 16-17, 20-22, 24 and 27-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cited references are art of interest.

6. The following is an examiner's statement of reasons for allowance: the recorded references do NOT teach or suggest the detail features as recited in dependent claims 4-12, 16-17, 20-22, 24 and 27-28.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan V. Mai whose telephone number is (703) 305-9761. The examiner can normally be reached on Tue-Fri from 6:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki, can be reached on (703) 305-9662. The fax phone numbers for the organization where this application or proceeding is assigned are:

Non-Official/Draft (703) 746-7240.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

TAN V. MAI PRIMARY EXAMINER